

# Standards of Public Land Health

## Evaluation of 62074 COX RANCH Allotment

### [ 12/08/2010 ]

The Roswell Field Office conducted rangeland health assessments at 1 study site within 62074 COX RANCH. The assessments looked at the Soil/Site Stability, Hydrologic Function and Biotic Integrity indicators within the vicinity of each study site. Existing monitoring data was incorporated into and in support of the field assessment. The summary of each assessment is attached and shown in the following table.

Study Area or Assessment Area	UPLAND			BIOTIC			RIPARIAN		
	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet
62074-IDSU-A075	X			X			N/A		

Twenty-two (22) indicators for Rangeland Health were evaluated for public land on the Cox Ranch allotment, #62074. Ten of these assessed soil site stability, 11 hydrologic functions and 13 assessed biotic integrity. These qualitative assessments in conjunction with quantitative information gathered from previous data collected at the trend study plot locations within the allotment were utilized to make rangeland health determinations. Quantitative evaluations are performed by the Roswell Field Office interdisciplinary teams, which include some or all of the following: ground and vegetative cover and composition, production, frequency and ecological condition. The collections which were initiated in the late 1970's/early 1980's, are scheduled and conducted approximately every 5 years. This allotment is in the "C" (Custodial) category.

This allotment contains 240 acres of public land. The study is located on one ecological site; Shallow CP-3. A majority of the indicators for this location fell into the None to Slight category; while two indicators were rated as a Moderate degree of departure from the ecological site description –Functional Structural Groups and Invasive Species. Both indicators were rated as such due to the amount of cholla invasion and influence.

There are no riparian areas on the public land within this allotment.

**Recommendations:** With the majority of the indicators falling in the None to Slight category or Slight to Moderate, this allotment is rated as "Meeting" the standards for Rangeland Health. Continue the rangeland monitoring studies to insure proper stocking rates are maintained and that the perennial grass cover and good plant composition remains. Due to the amount of public land involved, a good opportunity exists to work with other agencies, such as the New Mexico State Land Office and the Natural Resource Conservation Service, and the private land owner to consider implementing a prescribed fire as a vegetation treatment. The fire would help to reduce the amount of cholla present and to rejuvenate the grass species. To try to implement a treatment only on the public land would not be cost effective.

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 62074-IDSU-A075			
Legal Land Desc	NENW 12 0060N 0200E Meridian 23	Acreage	240
Ecosite	070CY113NM SHALLOW CP-3	Photo Taken	Y
Watershed	13060001190 GUADALUPE MINE		
Observers	ORTEGA & TRAUTNER	Observation Date	12/08/2010
County Soil Survey	NM019 GUADALUPE	Soil Var/Taxad	
Soil Map Unit	093	Soil Taxon Name	PASTURA
Texture Class	NM019 L	Soil Phase	PASTURA
Texture Modifier	NM019 LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation		NOAA Growing Season Precipitation	
NOAA Avg Annual Precipitation		NOAA Avg Growing Season Precipitation	
Disturbances and Animal Use:	this location is approximately 1/2 miles from a windmill and water - light to moderate use by cattle.		

Part 2. Attributes and Indicators						
		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns					X
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments:	slight but no exposed roots					
S H	Bare Ground					X
Comments:						
S H	Gullies					X
Comments:						

S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement					X
Comments:						
S H B	Soil Surface Resistance to Erosion					X
Comments:						
S H B	Soil Surface Loss or Degradation					X
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups			X		
Comments:	co-dominated by cholla and grama grass					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount					X
Comments:						
B	Annual Production					X
Comments:						
B	Invasive Plants			X		
Comments:	Cholla					
B	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological Crusts					X
Comments:						
B	Wildlife Habitat					X
Comments:						
B	Wildlife Populations					X
Comments:						

B	Special Status Species Habitat					
Comments:	Not applicable					
B	Special Status Species Populations					
Comments:	Not applicable					
<b>Part 3. Summary</b>						
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.						
Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	1	9
H	Hydrologic	0	0	0	1	10
B	Biotic	0	0	2	0	9
B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the <i>Does not Meet</i> column, Moderate becomes <i>May Need More Info</i> , and Slight to Moderate and None to Slight merge to form the <i>Meets</i> columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.						
Attribute	Rationale	Does Not Meet	May Need More Info	Meets		
Soil		0	0	10		
Hydrologic		0	0	11		
Biotic		0	2	9		
Site Notes: Mostly blue grama, bluestems present along road. Noted Arizona cottontop present.						

# **Determination of Public Land (Rangeland) Health for 62074 COX RANCH**

The Record of Decision (ROD) for the New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing management (dated January 2001) adopted three Standards for Public Land Health. These are (1) Upland Sites Standard, (2) Biotic Communities, including Native, Threatened, Endangered and Special Status Species Standard and (3) Riparian Sites Standard.

The ROD also established a process for the BLM Field Offices for implementation. Through a public participation process, the Roswell Field Office developed and adopted indicators to use in conjunction with existing monitoring data to assess these standards.

Field assessment worksheets and other available data that evaluated the local indicators were completed for this allotment. Based on these assessments, it is my determination that the public land within 62074 COX RANCH meets the (1) Upland Sites Standard and (2) Biotic Communities, including Native, Threatened, Endangered and Special Status Species Standard. There are no public land Riparian areas on this allotment therefore this standard was not addressed.

/s/ J. Howard Parman  
Assistant Field Manager

02/15/2011  
Date